

Attorney's Docket: RSW920040065US-09

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: John E. Dinger et al.)

Application No.: 10/711,956)

Confirmation No. 5955

Filed: October 15, 2004)

Group Art Unit: 2167

Title: METHOD AND SYSTEM TO
AUTOMATICALLY DEFINE
RESOURCES FORMING AN IT
SERVICE)

Examiner: Mariela D. Reyes

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Commissioner for Patents
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APPEAL BRIEF UNDER 37 CFR §41.37

This appeal is taken from the rejection of claims as set forth in the Office Action of September July 31, 2008 (hereinafter the Office Action). In accordance with 37 C.F.R. §41.37, Applicant addresses the following items.

REAL PARTY IN INTEREST

The real party in interest is International Business Machines Corporation. The assignment document is recorded at Reel 015250 and Frame 0754.

RELATED APPEALS AND INTERFERENCES

There are no related appeals and interferences.

STATUS OF THE CLAIMS

This is an appeal from the final rejection dated September July 31, 2008 of claims 1-32. No other claims are pending.

STATUS OF AMENDMENTS

There were no amendments made after the final rejection dated September July 31, 2008. All amendments filed in this application have been entered. A copy of the appealed claims 1-32 appear in the attached Claims Appendix.

SUMMARY OF THE CLAIMED SUBJECT MATTER

As stated in 37 C.F.R §41.37(c)(1)(v), Applicant is providing the following explanation of each of the independent claims 1, 13, 18, 23 and 28 involved in this appeal. This explanation refers to the specification and drawings. The following is merely an example summary and is not intended to be a discussion of the full and entire scope of the claims. Other interpretations, configurations and embodiments are also within the scope of the pending claims.

Independent Claim 1

Independent claim 1 is directed to a method to automatically define resources forming an information technology (IT) service, comprising tracking resources that have been utilized in responding to a request or set of requests or performing a transaction or a set of transactions (204), (Para. 18); and automatically defining resources that form an IT service by aggregating all resources utilized to respond to all requests or to perform all transactions (218) (Para. 19).

Independent Claim 13

Independent claim 13 is directed to a method to automatically define resources forming an information technology (IT) service, comprising: examining each instance of a request or transaction (202) (Para. 18); and maintaining a record of a union of all resources that have been utilized (204) in responding to each instance of a request or

to each instance of a transaction over a selected time period or on a rolling time period basis (212) (Para. 18, 19, 22).

Independent Claim 18

Independent claim 18 is directed to system (400) (Para. 25) that automatically defines resources (402) forming an information technology (IT) service, comprising: a processor (404); and a resource utilization program (408) operable on the processor (404), wherein the resource utilization program (408) includes computer executable instructions to maintain a record of a union of all resources (402) that have been utilized in responding to each instance of a request or to each instance of a transaction over a selected time period or on a rolling time period basis.

Independent Claim 23

Independent claim 23 is directed to a method of making a system (400) (Para. 25) that automatically defines resources forming an information technology (IT) service, comprising: providing a processor (404); and providing a resource utilization program (408) operable on the processor (404), wherein the resource utilization program (408) includes computer executable instructions to maintain a record of a union of all resources that have been utilized in responding to each instance of a request or to each instance of a transaction over a selected time period or on a rolling time period basis.

Independent Claim 28

Independent claim 28 is directed to a computer-readable medium having computer-executable instructions for performing a method, the medium comprising one of from the group consisting of an electronic medium, a magnetic medium, an optical medium, an electromagnetic medium, or a semiconductor medium, comprising: tracking resources that have been utilized in responding to a request or set of requests or performing a transaction or a set of transactions (204), (Para. 18); and automatically defining resources that form an information technology (IT) service by aggregating all resources utilized to respond to all requests or to perform all transactions (218), (Para. 19).

GROUND OF REJECTION

Claims 1, 2, 13, 18, 23 and 28 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,178,529 (Short et al.). Claim 3 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Short et al. in view of U.S. Patent No. 6,038,677 (Lawlor et al.). Claims 4 – 12, 14 – 17, 19 – 22, 24 – 27 and 29 – 32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Short et al. in view of U.S. Patent No. 7,069,558 (Stone et al.).

ARGUMENTS

Advisory Action dated October 27, 2008

In response to Applicant's arguments, the Examiner states that Applicant's Request for Reconsideration does not place the application in condition for allowance. The Examiner then asserts that Short et al., at col. 5, lines 55-65, discloses tracking resources that have been utilized in responding to a request and forming an IT service by adding the resources used to fulfill that request. However, these portions merely disclose:

[u]sually a group contains all of the elements needed to run a specific application, and for client systems to connect to the service provided by the application. For example, a group may include an application that depends on a network name, which in turn depends on an Internet Protocol (IP) address, all of which are collected in a single group. In a preferred arrangement, the dependencies of all resources in the group are maintained in a directed acyclic graph, known as a dependency tree, described in more detail below. Group operations performed on a group affect all resources contained within that group.

This is not tracking resources that have been utilized in responding to a request, as recited in the claims of the present application. Moreover, this is not forming an IT service by adding the resources used to fulfill that request.

In the Advisory Action, the Examiner states that the cited portions (col. 5, lines 55-65) disclose "that the group or cluster will be created based on the resources

needed to run a specific application. Therefore, it is necessary that the resources needed to fulfill a request for an application are going to be tracked. The cluster or group creator will use this information to cluster the needed resources.” As noted above, this is not disclosed in the cited portion. Even if it was, the Examiner fails to understand that resources that have been utilized (as recited in Applicant’s claims) is completely different from resources needed (as disclosed in Short et al.). One relates to past occurrences and the other to future needs.

No portion of Short discloses or suggests tracking resources that have been utilized in responding to a request or set of requests, or performing a transaction or a set of transactions, or automatically defining resources that form an IT service by aggregating all resources utilized to respond to all requests or to perform all transactions, as recited in the claims of the present application. The disclosure in Short et al. relates to components needed to operate a Windows NT service. This is not resources that have been utilized. Further, the disclosure in Short et al. of resources needed to operate is not resources that have been utilized, as recited in the claims of the present application. Moreover, Short et al. does not disclose or suggest tracking resources that have been utilized in responding to a request or set of requests, or performing a transaction or a set of transactions.

35 U.S.C. §102 Rejections

To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently. In re Schreiber, 128 F.3d 1473, 1477, 44 U.S.P.Q.2d (BNA) 1429, 1431 (Fed. Cir. 1997). The identical invention must be shown in as complete detail as is contained in the . . . claim. Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989); M.P.E.P. §2131. The elements must be arranged as required by the claim. In re Bond, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990); M.P.E.P. §2131. See also, In re Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990) (“[T]he [prior art] reference

must describe the applicant's claimed invention sufficiently to have placed a person of ordinary skill in the field of the invention in possession of it." (citations omitted)).

Although this disclosure requirement presupposes the knowledge of one skilled in the art of the claimed invention, that presumed knowledge does not grant a license to read into the prior art reference teachings that are not there.

It is respectfully submitted that the Examiner has not met the required legal burden as set forth by the courts to substantiate valid rejections under 35 U.S.C. 102(b).

Claims 1, 2, 13, 18, 23 and 28 have been rejected under 35 U.S.C. §102(b) as being anticipated by Short et al. Regarding these claims, Applicant submits that Short et al. does not disclose or suggest the limitations in the combination of each of these claims of, inter alia, tracking resources that have been utilized in responding to a request or set of requests, or performing a transaction or a set of transactions, or automatically defining resources that form an IT service by aggregating all resources to respond to all requests or to perform all transactions, or maintaining a record of a union of all resources that have been utilized in responding to each instance of a request or transaction over a selected time period or on a rolling time basis.

The Examiner asserts that Short et al. discloses these limitations in column 4, lines 43 – 54 and column 5, lines 23 – 36. However, as noted previously these portions merely disclose that to accomplish cluster creation and to perform other administration of cluster resources, systems, and the cluster itself, a cluster API is provided where applications and cluster management administration tools call various interfaces in the API, and that a cluster service includes a configuration database manager which implements the functions that maintain a cluster configuration database on a local device such as a disk and/or memory, and a configuration database on the common persistent storage devices where the database maintains information about the physical and logical entities in the cluster, including the cluster itself, systems, resource types, quorum of resource configuration, network configuration, groups and resources. This is

not tracking resources that have been utilized in responding to a request or set of requests, or performing a transaction or a set of transactions, as recited in the claims of the present application. The limitations in the claims of the present application relate to responding to a request or set of requests, or performing a transaction or a set of transactions and tracking the resources that have been utilized during the responding. Further, the limitations in the claims of the present application relate to automatically defining resources that form an IT service by aggregating all resources utilized during the responding. The Examiner fails to specifically identify where these limitations are disclosed or suggested in Short et al.

The Examiner fails to meet the required legal burden as set forth by the courts to substantiate valid rejections under 35 U.S.C. 102(b) since the Examiner fails to show where Short et al. discloses every limitation of the claimed invention, either explicitly or inherently, where the identical invention is shown in Short et al. in as complete detail as is contained in Applicant's claims, and that the elements in Short et al. are arranged as required by Applicant's claims.

The disclosure in Short et al. of an API for cluster creation and performing administration of cluster resources does not disclose or suggest the limitations in the claims of the present application. Further, the disclosure in Short et al. of a cluster service configuration database manager and a cluster configuration database does not disclose these limitations. Moreover, the cited portions of Short do not disclose or suggest automatically defining resources that form an IT service by aggregating all resources utilized to respond to all requests or to perform all transactions, or maintaining a record of the union of all resources that have been utilized in responding to each instance of a request or transaction over a selected time period or on a rolling time basis. Short et al. does not disclose or suggest anything related to resources that have been utilized.

Accordingly, Applicant submits that Short et al. does not disclose or suggest the limitations in the combination of each of claims 1, 2, 13, 18, 23 and 28 of the present

application. Applicant respectfully requests that these rejections be withdrawn and that these claims be allowed.

35 U.S.C. §103 Rejections

The ultimate determination of obviousness under §103 is a question of law. See, In re Leuders, 111 F.3d 1569, 1571, 42USPQ2d 1481, 1482 (Fed. Cir. 1997). The factual predicates underlying an obviousness determination include the scope and content of the prior art, the differences between the prior art and the claimed invention, and the level of ordinary skill in the art at the time of the invention. See, Monarch Knitting Mach. Corp. v. Sulzer Morat GmbH, 139 F.3d 877, 881, 45 USPQ2d 1977, 1981 (Fed. Cir. 1998).

To reject claims in an application under Section 103, an Examiner must show an unrebutted prima facie case of obviousness. See, In re Deuel, 51 F.3d 1552, 1557, 34 USPQ2d 1210, 1214 (Fed. Cir. 1995). In the absence of a proper prima facie case of obviousness, an applicant who complies with the other statutory requirements is entitled to a patent. See, In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). It is respectfully submitted that the Examiner has not met the required legal burden as set forth by the courts to substantiate valid rejections under 35 U.S.C. 103(a).

Claim 3 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Short et al. in view of Lawlor et al. Applicant respectfully traverses this rejection and submits that claim 3 is dependent on independent claim 1 and, therefore, is patentable at least for the same reasons noted previously regarding this independent claim. Applicant submits that Lawlor et al. does not overcome the substantial defects noted previously regarding Short et al.

Accordingly, Applicant submits that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of claim 3 of the present application. Applicant respectfully requests that this rejection be withdrawn and that this claim be allowed.

Claims 4 – 12, 14 – 17, 19 – 22, 24 – 27 and 29 – 32 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Short et al. in view of Stone et al. Applicant respectfully traverses these rejections and submits that these claims are dependent on one of independent claims 1, 13, 18, 23 and 28 and, therefore, are patentable at least for the same reasons noted previously regarding these independent claims. Applicant submits that Stone et al. does not overcome the substantial defects noted previously regarding Short et al.

Accordingly, Applicant submits that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of each of claims 4 – 12, 14 – 17, 19 – 22, 24 – 27 and 29 – 32 of the present application. Applicant respectfully requests that these rejections be withdrawn and that these claims be allowed.

CLAIMS APPENDIX

The attached Claims Appendix contains a copy of the claims involved in the appeal.

EVIDENCE APPENDIX

Applicant has not provided any evidence with this appeal and therefore an Evidence Appendix is not provided.

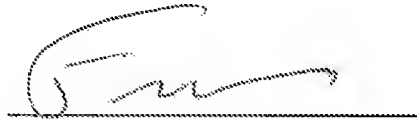
RELATED PROCEEDINGS APPENDIX

Applicant is not providing copies of related decisions and therefore a Related Proceeding Appendix is not provided.

CONCLUSION

It is respectfully submitted that the above arguments show that each of claims 1-32 are patentable over the applied references. Based at least on these reasons, it is respectfully submitted that each of claims 1-32 defines patentable subject matter. The Examiner's rejections have been shown to be in clear error and lack essential elements of a rejection as required under 35 U.S.C. §102 and §103 and related case law, for the reasons stated above. Applicant respectfully requests that the rejections of claims 1-32 set forth in the Office Action be withdrawn and that these claims be allowed.

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CLAIMS APPENDIX

1. A method to automatically define resources forming an information technology (IT) service, comprising:
tracking resources that have been utilized in responding to a request or set of requests or performing a transaction or a set of transactions; and
automatically defining resources that form an IT service by aggregating all resources utilized to respond to all requests or to perform all transactions.
2. The method of claim 1, further comprising adding any new resources utilized to a resource list.
3. The method of claim 2, further comprising removing any resource from the resource list in response to the resource not being utilized for a predetermined time duration.
4. The method of claim 1, further comprising determining a percentage of utilization of each resource across all requests or transactions.
5. The method of claim 4, further comprising automatically assigning a priority to each resource according to the percentage of utilization of the resource.
6. The method of claim 5, further comprising presenting a resource list and an associated priority for each resource to a user or requestor.
7. The method of claim 5, further comprising adjusting a status propagation logic based on the priority assigned to each resource.

8. The method of claim 1, further comprising presenting a resource utilization diagram to a user or requestor.

9. The method of claim 8, further comprising representing a percentage of utilization of each resource in the resource utilization diagram.

10. The method of claim 9, further comprising representing a priority of each resource in the resource utilization diagram, wherein the priority is automatically assigned according to the percentage of utilization of the resource.

11. The method of claim 8, further comprising representing a quantity of occurrences of each segment linking resources in the resource utilization diagram.

12. The method of claim 8, further comprising representing a time duration since each resource was last utilized in the resource utilization diagram.

13. A method to automatically define resources forming an information technology (IT) service, comprising:
examining each instance of a request or transaction; and
maintaining a record of a union of all resources that have been utilized in responding to each instance of a request or to each instance of a transaction over a selected time period or on a rolling time period basis.

14. The method of claim 13, further comprising determining a percentage of utilization of each resource across all requests or transactions.

15. The method of claim 14, further comprising automatically assigning a priority to each resource according to the percentage of utilization of the resource.

16. The method of claim 14, further comprising adjusting a status propagation logic based on a priority assigned to each resource.

17. The method of claim 13, further comprising presenting a resource utilization diagram to a user or requestor.

18. A system that automatically defines resources forming an information technology (IT) service, comprising:
a processor; and
a resource utilization program operable on the processor, wherein the resource utilization program includes computer executable instructions to maintain a record of a union of all resources that have been utilized in responding to each instance of a request or to each instance of a transaction over a selected time period or on a rolling time period basis.

19. The system of claim 18, wherein the resource utilization program comprises computer executable instructions to determine a percentage of utilization of each resource across all request or transactions.

20. The system of claim 19, wherein the resource utilization program comprises computer executable instructions to automatically assign a priority to each resource according to the percentage of utilization of the resource.

21. The system of claim 18, wherein the resource utilization program comprises computer executable instructions to adjust a status propagation logic based on the priority assigned to each resource.

22. The system of claim 18, wherein the resource utilization program comprises executable instruction to present a resource utilization diagram to a user or requestor.

23. A method of making a system that automatically defines resources forming an information technology (IT) service, comprising:
providing a processor; and
providing a resource utilization program operable on the processor, wherein the resource utilization program includes computer executable instructions to maintain a record of a union of all resources that have been utilized in responding to each instance of a request or to each instance of a transaction over a selected time period or on a rolling time period basis.

24. The method of claim 23, further comprising providing computer executable instructions to determine a percentage of utilization of each resource across all request or transactions.

25. The method of claim 24, further comprising providing computer executable instructions to automatically assign a priority to each resource according to the percentage of utilization of the resource.

26. The method of claim 23, further comprising providing computer executable instructions to adjust a status propagation logic based on a priority assigned to each resource.

27. The method of claim 23, further comprising providing computer executable instructions to present a resource utilization diagram to a user or requestor.

28. A computer-readable medium having computer-executable instructions for performing a method, the medium comprising one of from the group consisting of an electronic medium, a magnetic medium, an optical medium, an electromagnetic medium, or a semiconductor medium, comprising:

tracking resources that have been utilized in responding to a request or set of requests or performing a transaction or a set of transactions; and

automatically defining resources that form an information technology (IT) service by aggregating all resources utilized to respond to all requests or to perform all transactions.

29. The computer-readable medium having computer executable instructions for the method of claim 28, further comprising automatically assigning a priority to each resource according to the percentage of utilization of the resource.

30. The computer-readable medium having computer executable instructions for performing the method of claim 29, further comprising presenting a resource list and an associated priority for each resource to a user or requestor

31. The computer-readable medium having computer executable instructions for performing the method of claim 29, further comprising adjusting a status propagation logic based on the priority assigned to each resource.

32. The computer-readable medium having computer executable instructions for performing the method of claim 28, further comprising presenting a resource utilization diagram to a user or requestor.